

Application Serial No. 09/922,852
Attorney's Docket No.:06618-503001

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested. Initially, the indication that claim 6 is allowed is appreciatively noted.

The informalities in claims 3, 29, 33, 34, 40, 49-56, and 61 have been corrected.

Claims 10, 17, 18 and 23 stand rejected under 37 CFR 1.75 as allegedly being in improper dependent form. Claim 10 has been corrected, and claims 17, 18 and 23 have been canceled.

Claims 2, 14, 18, 24, 25, 34, 35, 38, 46 and 56-68 stand rejected under 35 USC 112, second paragraph. In response, these claims are amended for definiteness, where necessary.

The objection to claim 2 is respectfully traversed, since claim 2 already stated "said second encoding". This was added in the amendment dated January 27, 2004.

The suggested change to claim 14 has been made.

Claims 24 and 25 that been canceled to obviate the rejection.

Claim 34 is also been amended to recite that the coding system is itself arranged as a tree.

Claims 38 and 53 have been amended to clarify the context of the interleaver.

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Claim 59 has been amended to provide a proper antecedent basis for the data.

The interleaver has also been clarified. The language has also been clarified to make this consistent with the recursive coders such as in claims 64 and 65.

Claims 60 and 61 have been clarified.

Claims 1-5, 7-10, 13-25, 27-32, 34-41, 43-50, 52-63, 65 and 66 stand rejected under 35 USC 102(e) as allegedly being anticipated by Wang. This contention, however, is respectfully traversed. Claim 1 has been amended to make it more clear that the first encoding uses a rate one coder and that this is a serially concatenated code.

Wang teaches a parallel concatenation of two recursive convolutional codes. This is very different than the present claims, as for example claim 1, which defines serial concatenation. Apparently the rejection takes the single path through the bit repetition in figure 5, followed by the second encoder interleaver in figure 5, followed by the second encoder in figure 5. The rejection alleges that the second in coder has a rate close to 1, pointing to figure 6. However, the figure 6 embodiment, as described beginning column 16 is only usable when the interleavers are not in use. Even then, it appears that the code rate becomes rate 1/2 are plus 1 for code rate is

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different. In any case, all claims have been amended to require iterative decoding. The Wang system does not teach and could not be modified to use such iterative decoding. Therefore, claim 1 should be allowable along with the claims that depend therefrom. The references may show similar components, but do not show the same coding scheme.

Claims 19 and others stand rejected as being anticipated by Bliss. Claims 19 and others also stand rejected as being anticipated by Rhines. These rejections have been obviated by the amendments made herein to these claims to recite the iterative decodability.

Claim 13 should be allowable for similar reasons.

Claim 19 has been amended to recite that the coder forms a serially concatenated coder, that produces a code that can be iteratively decoded. This is nowhere taught or suggested by Wang who teaches an entirely different kind of code. Therefore, claim 19 should be allowable along with the claims that depend therefrom.

Claim 7 specifies that the second encoding is done by an accumulator, and has a transfer function of $1/(1+D+D^2)$. In order to maintain a consistent interpretation, however, the second coder, must be that second encoder in figure 5 of Wang. Nowhere

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is there any teaching or suggestion that $1/1$ has that specific transfer function.

Claim 26 defines that the inner coder codes according to the transfer function $1/1+D$. Claim 27 defines the transfer function $1/(1+D+D^2)$. Claim 27 should be allowable for reasons discussed above,

Claim 36 has been amended to recite an iterative decoder, that receives the code over the channel and enables the coding. Again, this is in no way taught or suggested by the cited prior art.

Claims 42 and 43 should be additionally allowable for reasons discussed above.

Claim 48 has been similarly amended.

Claim 59 has also been amended in the similar way, and should be allowable for similar reasons.

Claims 67 and 68 have been amended based on Wang in view of the newly cited reference to Wiberg, et al. However, the amendments made above obviate this rejection.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be

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exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

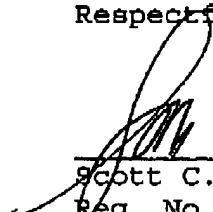
In view of the above amendments and remarks, therefore, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

Pursuant to 37 CFR §1.136, applicant hereby petitions that the period for response to the action dated April 6, 2004, be extended for three months to and including October 6, 2004.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 6, 2004



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